

CLAIMS

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3 I claim:

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July 5/
5 1. An automatically adjustable rear suspension for trike comprising a supply of pressurized gas
6 pneumatically connected to a valve, at least one air spring pneumatically connected to said valve,
7 said air spring being disposed between a trike swing arm and a trike frame, said valve being
8 mechanically attached to said swing arm by means of a valve pushrod.

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10 2. The automatically adjustable rear suspension for trike of claim 1 wherein said trike swing arm
11 further comprises at least one L arm, each said L arm comprising an L arm horizontal member
12 rigidly attached to an L arm vertical member, each said air spring being disposed between one said
13 L arm horizontal member and said trike frame.

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15 3. The automatically adjustable rear suspension for trike of claim 2 wherein said trike swing arm
16 further comprises an axle, said valve pushrod mechanically connecting said axle and said valve.

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18 4. The automatically adjustable rear suspension for trike of claim 3 further comprising a gas
19 shock absorber attached at one extreme to said trike frame and at an opposite extreme to said
20 trike swing arm.

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22 5. The automatically adjustable rear suspension for trike of claim 4 wherein said supply of
23 pressurized gas comprises an air compressor.

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2 6. The automatically adjustable rear suspension for trike of claim 5 wherein said supply of

3 pressurized gas comprises an accumulator pneumatically connected to said compressor.

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5 7. The automatically adjustable rear suspension for trike of claim 6 wherein said accumulator is

6 pneumatically connected to said valve by means of a valve supply line, and wherein said valve is

7 connected to said at least one air spring by means of an air spring supply line.

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9 8. An automatically adjustable rear suspension for trike comprising a supply of pressurized gas

10 pneumatically connected to a valve, two air springs pneumatically connected to said valve, each

11 said air spring being disposed between a trike swing arm and a trike frame, said trike swing arm

12 being pivotably attached to a motorcycle frame at a pivot point, said trike frame being rigidly

13 attached to said motorcycle frame, said valve being mechanically attached to said swing arm by

14 means of a valve pushrod.

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16 9. The automatically adjustable rear suspension for trike of claim 8 wherein said trike swing arm

17 further comprises two L arms, each said L arm comprising an L arm horizontal member rigidly

18 attached to an L arm vertical member, each said air spring being disposed between one said L arm

19 horizontal member and said trike frame.

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21 10. The automatically adjustable rear suspension for trike of claim 9 wherein said trike swing arm

22 further comprises an axle, said valve pushrod mechanically connecting said axle and said valve.

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1 11. The automatically adjustable rear suspension for trike of claim 10 further comprising a gas
2 shock absorber attached at one extreme to said trike frame and at an opposite extreme to said
3 trike swing arm.

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5 12. The automatically adjustable rear suspension for trike of claim 11 wherein said supply of
6 pressurized gas comprises an air compressor.

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8 13. The automatically adjustable rear suspension for trike of claim 12 wherein said supply of
9 pressurized gas comprises an accumulator pneumatically connected to said compressor.

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11 14. The automatically adjustable rear suspension for trike of claim 13 wherein said accumulator is
12 pneumatically connected to said valve by means of a valve supply line, and wherein said valve is
13 connected to said at least one air spring by means of an air spring supply line.

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15 15. A motorized tricycle comprising an automatically adjustable rear suspension for trike, said
16 automatically adjustable rear suspension for trike comprising a supply of pressurized gas
17 pneumatically connected to a valve, two air springs pneumatically connected to said valve, each
18 said air spring being disposed between a trike swing arm and a trike frame, said trike swing arm
19 being pivotably attached to a motorcycle frame at a pivot point, said trike frame being rigidly
20 attached to said motorcycle frame, said valve being mechanically attached to said swing arm by
21 means of a valve pushrod.

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1 16. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
2 15 wherein said trike swing arm further comprises two L arms, each said L arm comprising an L
3 arm horizontal member rigidly attached to an L arm vertical member, each said air spring being
4 disposed between one said L arm horizontal member and said trike frame.

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6 17. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
7 16 wherein said trike swing arm further comprises an axle, said valve pushrod mechanically
8 connecting said axle and said valve.

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10 18. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
11 17 further comprising a gas shock absorber attached at one extreme to said trike frame and at an
12 opposite extreme to said trike swing arm.

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14 19. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
15 18 wherein said supply of pressurized gas comprises an air compressor electrically connected to a
16 motorized tricycle electrical system.

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18 20. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim
19 19 wherein said supply of pressurized gas comprises an accumulator pneumatically connected to
20 said compressor.